

**Annual Report on the Activities of the
ConnectME Authority**

**Report to the Maine State Legislature
Joint Standing Committee on Utilities and Energy**



January 14, 2010

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2010 Annual Report on the Activities of the ConnectME Authority**Report to the Joint Standing Committee on Utilities and Energy****January 14, 2010****EXECUTIVE SUMMARY**

In recognition of the critical importance of technology for education, health and business success in Maine, the legislature created the ConnectME Authority (Authority) in 2006, to develop and implement its broadband strategy for Maine.¹ In 2007, the Legislature approved the Authority's major substantive rule that defines the state's broadband strategy and implementation process.

In 2009, the Legislature created the Broadband Strategy Council (BBSC) to help implement Maine's stated broadband strategy. The functions of the BBSC are: to advise the ConnectME Authority on opportunities available under the American Recovery and Reinvestment Act of 2009 (ARRA); and to advise the University of Maine System with respect to matters pertaining to the lease or sale of excess broadband capacity of the educational broadband service (EBS).² One of the ARRA projects recommended by the BBSC to the Authority and Governor was recently awarded \$25.4 million for a middle mile-fiber ring project.

The goal of the Authority is to facilitate universal availability of broadband service and to increase the "take rate" or adoption to equal or greater than the national average. Increasing access and take rates is critical to Maine's education and economic prosperity. Nearly three years ago, approximately 86% of the State had access to high-speed Internet service with an adoption rate of approximately 40%. In the three years since the Authority was established, we estimate that broadband access or availability has risen to over 90% and nearly 60% of Maine households subscribe to some type of broadband service (compared to 75% nationally).³

The Authority increased the access and take rates through its charge of identifying areas that do not have broadband access and then, to select projects for broadband expansion; administer the projects; and to provide funding, resources, and incentives for the projects. The Authority has struggled with incomplete data regarding the location of unserved areas of the state. The recently started comprehensive broadband mapping and inventory project will alleviate that problem and facilitate a more proactive approach to funding infrastructure projects in unserved areas.

¹ PL 2005, c. 665, and PL 2008, c. 698.

² Resolve, Chapter 108, 124th Legislature, First Regular Session.

³ "High-Speed Services for Internet Access: Status as of June 30, 2008," Federal Communications Commission, July 2009.

Much more work needs to be done meet these broadband strategy goals. As important, continued work needs to be done to bring all levels of government and agencies together to work collaboratively to get the best results for Maine's future.

This report summarizes the Authority's activities; describes federal activities and initiatives; and outlines the Authority's ongoing activities.

In 2009, the Authority awarded its third round of grants, based on smaller, more focused proposals. The Authority suggested grant limits of \$100,000 per project, funding no more than 50% of the total project. Recognizing the need for flexibility for exceptional proposals, we made eight awards for just over \$600,000 (total project value of \$1.23 million), to serve over 4,200 households in the most rural areas of Maine

The following table summarizes all the Authority's grant activities to date:

Grant Year	# of Grants	Grant Range	Total Grants	Total Project Amount	Household Availability	Increased Availability ⁴
2007	6	\$38K - \$370K	\$738,724	\$1.53 million	13,800	2.7%
2008	5	\$45K - \$533K	\$1.44 mil	\$5.5 million	9,000	1.7%
2009	8	\$43K - \$232K	\$609,860	\$1.23 million	4,200	.8%
	19		\$2.79 mil	\$8.26 million	27,000	5.20%

The grant dollars per household availability is higher for the last two rounds, and is expected to continue to rise, because the areas covered are becoming more difficult to serve and the projects are smaller.

The Authority's Executive Director also facilitated a legislatively mandated stakeholder process to develop a "voluntary" model cable franchise agreement for municipalities and cable companies that choose to use it. ⁵ The final model franchise agreement is posted on the Authority's website.

In 2010, the Authority will:

- Complete the first phase of a comprehensive broadband mapping and inventory project to define served and unserved areas of the State, to be partially funded by an NTIA BTOP mapping grant;
- Continue to refine the Authority's goals, minimum performance criteria for broadband service, and areas eligible for Authority support, with guidance from the Legislature and the Advisory Council;

⁴ Based on the 2000 Census for population and number of households in Maine, obtained from the State Planning Office. Total occupied housing units = 518,200, population = 1.275 million, 2.39 = average household size.

⁵ PL 2007, c. 548. A separate report and the model franchise agreement were submitted to the Joint Standing Committee on Utilities and Energy on October 28, 2009.

- Serve as a conduit for Maine's broadband initiatives at all levels of government and across agencies;
- Monitor and assist the eight (2009) third round grantees to ensure that they have the resources necessary and that they meet grant requirements; and
- Conduct a fourth grant round over the next few months.

In addition, the Executive Director will:

- Continue to work with the Broadband Strategy Council and other Maine agencies to review and support "stimulus package" proposals in the upcoming funding round that enhance Maine's broadband infrastructure and technology including education and rural health initiatives;
- Assist Network Maine (a consortium including the Maine Department of Education, State Library, Office of Information Technology, and University of Maine System) with efforts for the Maine School and Library Network to connect every K-12 public school and public library to the internet with high-speed fiber-based access;⁶
- Continue working with the rural health care pilot program grantees to enhance telehealth broadband connections;
- Develop policies and procedures for use of public and private facilities such as radio towers, buildings, and rights-of-way by private service providers for expanding broadband and cellular service; and
- Participate in the state's Health Information Technology (HIT) initiatives. Maine has formed a "stakeholder" group to work on the HIT initiative. The ConnectME Authority wholeheartedly agrees with the importance of technology and medicine.

⁶ The Maine School and Library Network (MSLN) began in 1996. MSLN provides internet access to approximately 950 schools and libraries statewide. MSLN is funded from the Federal E-Rate program (approximately 60% of the cost) and the Maine Telecommunications Education Access Fund (MTEAF) (approximately 40% of the cost). Funds are generated through an assessment on interstate phone bills for the Federal E-Rate portion and on intrastate bills for the MTEAF portion (0.6%).

INTRODUCTION

The ConnectME Authority 2010 annual report is divided into five sections: I. Background; II. Summary of Authority and Broadband Activities; III. Federal Broadband Activities and Initiatives; IV. Ongoing Authority Activities; and V. Conclusion and Attachments.

I. BACKGROUND

A. The Importance of Broadband

A number of national organizations, governmental agencies, and public-interest groups have provided studies documenting the importance of broadband or high-speed internet access for rural states (such as the Federal Communications Commission, Pew Internet & American Life Project, and the USDA's Economic Research Service). The overwhelming consensus is that access to broadband services is a significant economic development tool for small businesses and home-based businesses, and enables telecommuting, rural education, and telemedicine.

It is worth repeating from last year's report as it is even more relevant and important today, that:

Speed defines what is possible. It determines the amount of information that can be transmitted in a given time, the quality of the transmission, and the timeliness of the transmission. Speed determines the type of transmission possible: two-way, voice, data, audio, and video.

Benefits from truly high speed Internet networks include:

- Economic Growth & Quality Jobs. New, high speed Internet applications create jobs and opportunities for innovation, growth, and e-commerce. Technology allows businesses based in rural and remote communities to compete in the global economy.
- Telemedicine and Independent Living. High speed Internet allows instantaneous, interactive contact between health professionals and patients permitting remote monitoring, efficient chronic disease management, and more effective responses to emergencies. High speed Internet can help senior citizens and people with disabilities live independently, improve their quality of life, and reduce costs of care.
- Education & Integrated Learning. Two-way high speed communication and videoconferencing allows students and teachers to minimize the obstacles of distance and maximize the potential of simultaneous voice, data, and video sharing.

- E-Government, Civic Participation and Public Safety. Advanced high speed networks will allow citizens to increase participation in civic life, beyond simply downloading forms or researching programs. Government meetings could be opened to many more citizens using two-way video technology. High speed networks enable police, fire, and emergency personnel to coordinate and respond more quickly to crises.⁷

A recent study that addresses the ConnectME Authority's primary goal of expanding availability is from the Economic Research Service of the United States Department of Agriculture. It says, "Whereas an estimated 55 percent of U.S. adults had broadband access at home in 2008, only 41 percent of adults in rural households had broadband access. Evidence suggests that some of this shortfall in broadband use is involuntary, and may be due to the higher cost of broadband provision or lower returns to broadband investment in sparsely populated areas."⁸

The 2009 Pew Broadband Adoption Study found, generally, that relevance, price, availability, and usability were the main reasons cited for not using broadband at home.⁹ Based on this and other research and comments filed in the record, the Federal Communications Commission (FCC) "believes that the primary barriers non-adopters face include: affordability of service, affordability of hardware, insufficient digital and technical literacy levels, unawareness of the personal relevance and utility of broadband technology and online content and an inability to use existing technology and applications due to physical or mental disabilities."¹⁰

Finally, the importance and necessity of broadband was emphasized in a draft report from Maine Innovation Economy Advisory Board. The 2010 Science and Technology Action Plan articulated a vision: "Create an environment where science, technology, innovation, and entrepreneurship stimulate Maine's economy." Strategy 2.3 to accomplish that vision says, "Build a supportive environment for high-growth, high-potential, innovation-based enterprises." Section 2.3.1, says,

Provide the telecommunications infrastructure necessary for Maine businesses to compete globally by:

- Providing high-speed, high bandwidth broadband to businesses throughout the state.

⁷ "Speed Matters: High Speed Internet for All," October 16, 2006, <http://www.speedmatters.org/>

⁸ "Broadband Internet's Value for Rural America," ERR-78. Economic Research Service/USDA, August 2009.

⁹ Internet & American Life Project, "Home Broadband Adoption 2009" (2009).

¹⁰ Federal Communications Commission, GN Docket Nos. 09-47, 09-51, and 09-137, NBP Public Notice # 16, released November 10, 2009.

- Improving wireless coverage.¹¹

B. The Connect ME Initiative

As early as 1995, the Maine Legislature recognized the value of broadband when it stated:

The Legislature further declares and finds that computer-based information services and information networks are important economic and educational resources that should be available to all Maine citizens at affordable rates. It is the policy of the State that affordable access to those information services that require a computer and rely on the use of the telecommunications network should be made available in all communities of the State without regard to geographic location.¹²

In 2006, the Legislature created the ConnectME Authority to develop and carry out its broadband strategy by identifying unserved areas of the State; developing proposals for broadband expansion projects, demonstration projects and other initiatives; administering the process for selecting specific broadband projects; and providing funding, resources, and incentives.¹³ In 2007, the Legislature also approved the Authority's major substantive rule that defines the state's broadband strategy and describes how that strategy is to be implemented. The Authority consists of a board of five members, an Executive Director, Staff from the Public Utilities Commission and the Governor's Office, and an Advisory Council. (See attachment A for the Authority and Advisory Council members).

In 2009, the Legislature created the Broadband Strategy Council to further refine and develop Maine's stated broadband strategy. The primary function of the BBSC is to advise the ConnectME Authority on all matters pertaining to broadband opportunities available under the American Recovery and Reinvestment Act of 2009, as well as advise the University of Maine System with respect to matters pertaining to the lease or sale of excess broadband capacity of the educational broadband service.¹⁴

¹¹ "2010 Science and Technology Action Plan, A Bold Approach to Stimulate Maine's Economy," Final Draft, October 28, 2009. Maine Innovation Economy Advisory Board, and Maine Office of Innovation, Department of Economic and Community Development.

¹² Title 35-A M.R.S.A. §7101(4).

¹³ PL 2005, c. 665.

¹⁴ Resolve, Chapter 108, 124th Legislature, First Regular Session.

II. SUMMARY OF AUTHORITY AND BROADBAND ACTIVITIES

The ConnectME Authority statute requires the Authority to report on four components: Budget; Investments; Activities; and Market Conditions. This Section covers the first three items. Market Conditions are reported on in Section IV.

A. Budget

The funding mechanism for the Authority is a 0.25% (one quarter of one percent) surcharge on all communications, video, and internet service bills for retail in-state service.¹⁵ It is expected to generate between \$1.25 million, and \$1.4 million per year. Verizon-Maine, as a condition of the stipulation that was approved by the Public Utilities Commission in approving Verizon's merger with Fairpoint, contributed \$2.5 million to the ConnectME Fund.¹⁶ It was received on May 8, 2008, and continues to provide resources for the Authority.

The grants awarded in 2007 and 2008, total over \$2.2 million. The third grant round, awarded in July 2009, totaled over \$600,000. The ConnectME fund balance on December 31, 2009, is \$3,316,136. (See Attachment B for fund reports)

B. Investments

The ConnectME Fund is administered by an independent fiscal agent who manages the assessment process, invests the unused funds, and makes payments as directed by the Authority. The fund administrator operates under contract at the direction of the Executive Director.¹⁷ Interest generated by the fund is added to the fund balance. Infrastructure improvements are described above and listed in Attachment C, grant awards.

C. Grant Activities**1. Awarding Process and Grants Awarded**

¹⁵ Also included are retail revenues received or collected from mobile communications services (i.e. cellular telephone) that voluntarily agree to be assessed by the Authority.

¹⁶ On December 21, 2007, in MPUC Docket No. 2007-67, known as the Verizon-Fairpoint merger case, an amended stipulation was filed and accepted that contained a provision stating (on page 10): "...within 30 days of closing Verizon will make a one-time cash contribution in the amount of \$2.5 million to the ConnectME Authority in furtherance of the Authority's statutory objectives." Approved by MPUC ORDER, Docket No. 2007-67, issued February 1, 2008.

¹⁷ The quarterly assessments are paid to an independent fund administrator the month after the end of each quarter. Rolka Loube Saltzer Associates (RLSA) is the fund administrator for the ConnectME Fund as well as the Maine Universal Service Fund and the Maine Telecommunications Education Access Fund.

The Maine Legislature established the Authority “to stimulate investment in advanced communications technology infrastructure in *unserved* or underserved areas.”¹⁸ The Authority believes that the goal to expand broadband access in the most rural, *unserved* areas that have little prospect of broadband service from a traditional or existing provider is a priority. The Authority accomplishes that goal primarily by awarding broadband expansion grants for projects that serve unserved areas.

Grant applications are reviewed by three non-industry members of the ConnectME Authority Advisory Council, the Executive Director, and one ConnectME staff member. The applications are scored on the four criteria specified in the statute and rule: cost-benefit; community support; project scope; and project value. The public-private partnership concept is considered in the review, yet “getting the most for the money” is also a high priority because of the limited funds available.

For the first grant round (2007) the Authority awarded six grants totaling over \$738,000 for total project amounts of over \$1.53 million.¹⁹ The grants ranged from \$38,000 to nearly \$370,000, and serve over fifty communities, with the potential of providing broadband service to nearly 14,000 households and businesses. The completed grant projects represent a potential increase in broadband availability of approximately 2.7%.²⁰

For the second round (2008) the Authority awarded five grants for \$1.44 million for total project amounts of over \$5.5 million. Four of the projects will expand access to high speed internet service to over forty-five communities representing nearly 9,000 households and businesses and add another 1.7% in potential household broadband availability.

The fifth grant was significantly different from the others. The Authority decided to award a grant to Franklin Community Health Network (FCHN) to help fund a fiber optic cable network that will connect three partnering medical centers and seven health care facilities in six towns across Franklin, Oxford, and Androscoggin counties, providing high speed telehealth services.²¹ The ConnectME funds will provide part of the match requirement for a \$3.6 million Federal Communications Commission (FCC) Rural Health Care Pilot Project grant.²² This project is a long term investment. Initially,

¹⁸ 35-A, M.R.S.A. §9203(1).

¹⁹ The small grant to fund a project serving the Town of Edgecomb was cancelled due to non-performance. The town applied for and received a grant in the third round.

²⁰ 2000 Census (Maine State Planning Office), total occupied housing units = 518,200, population = 1.275 million, 2.39 = average household size.

²¹ Franklin Community Health Network, <http://www.fchn.org/>.

²² The grant has two conditions from the Authority: 1) The selected service provider would be an Authority eligible provider; and 2) The selected provider must agree to install additional commercially available fiber facilities at its own expense. These conditions will ensure that the provider is an “eligible applicant” as

medical facilities will be connected to the FCHN network and all potential patients will benefit. In the longer term, the fiber rings will be available to businesses and Internet Service Providers for high bandwidth connections and backhaul (the connection to the network backbone and the internet).

For its third round of grant funding (2009), the Authority requested smaller, more focused proposals than in previous grant rounds, with a suggested grant limit for each project of \$100,000, funding no more than 50 percent of the total project, while recognizing the need for flexibility for exceptional proposals. We made eight awards for just over \$600,000 (total project value of \$1.23 million), to serve over 4,200 households in the most rural areas of Maine. The Authority provided funds to projects in the most rural areas of Maine, from Rockwood and South Rangely, to Jackman, Hammond, Arrowsic, and Edgecomb.

2. Oversight

The progress of the projects supported by the Authority is tracked through a monitoring and reporting process. The grant recipients document the expenditure of Authority funds which ensures that the funds are used only for appropriate purposes. Three reporting forms were developed with the assistance of the Authority Advisory Council:

- Notice of Commencement – which requires a schedule of project milestones and the expected completion date. Each vendor for the funded project is identified on the form along with appropriate reports and documentation such as invoices and purchase orders.
- Progress Report – which provides a project update to demonstrate to the Authority that the funded project is on track. The Executive Director monitors each project's progress and use of funds.
- Completion Report – which is a final report that documents the completion of the project with attached financial spreadsheets and a listing of the communities newly served with broadband service as a result of the project.

Attachment C includes summaries for those projects that have been funded.

3. Monitoring the 2009 Third Round Grants

The Authority will monitor and assist the eight 2009 third round grant awardees to ensure that they have the resources necessary to complete their projects as required by the grant award.

defined in the Authority's rule and that additional fiber capacity will be available to provide high speed service for other economic development projects.

The Authority notes that two of the ten initial 2009 grant awards were cancelled because one was challenged by an existing or incumbent broadband service provider (as allowed by the Authority statute and rule) or cancelled by request because private investment would accomplish the same goal. The Authority strongly encourages parties to work together in crafting solutions that would provide the best expansion project while minimizing the impact on existing service providers.

The initial grant challenge process was extremely cumbersome and time consuming, mainly because it was difficult to determine whether the areas in question are “unserved.” As a result, the application, review, and approval process was significantly revised. The most important change is to contact and involve the incumbent providers at the beginning of the grant application stage to collaborate with potential grant applicants to avoid overlapping projects. Better, more detailed data from the applicants is also required to delineate the proposed project areas. These changes greatly decreased the need for challenges and make the funds available more quickly.

4. Implementing the 2010 Fourth Grant Round

The Authority is conducting a fourth round of grant applications with pre-application letters due by January 29, 2010, and hopes to start a fifth round later in the year. As for the third round, the Authority is again requesting smaller, focused proposals, with a suggested grant limit for each project of \$100,000, funding no more than 50% of the total project, while recognizing that we can be flexible for exceptional proposals. The Authority is looking for creative solutions for expanding affordable broadband service to the unserved areas of Maine. These changes should encourage more targeted solutions, make the projects more manageable, and ease oversight.

D. ConnectME Authority Advisory Council

The ConnectME Advisory Council assisted the Authority in defining “broadband” for grant purposes; defining “unserved” areas; and, most importantly, developing a grant condition that protects private investment, while allowing grantees to provide service in unserved areas. The condition says that grant funds may not be used to install end-user equipment in areas or to customers that can subscribe to broadband service from another provider under “normal” installation rates and processes. The condition runs for a minimum of one year from the completion of the grant funded project.

E. Model Cable Television Franchise Agreement

The Authority’s Executive Director, representing the Department of Administrative and Financial Services, Office of Information Technology (OIT), formed a stakeholder/working group and conducted a series of meetings over the course of approximately eighteen months. Legislation directed OIT to “develop a model franchise

agreement for use by any municipality and any cable system operator that mutually choose to adopt the model franchise agreement or any of its provisions.”²³

The working group consisted of members or representatives from municipalities, Maine Municipal Association, industry groups, cable companies, telephone companies, and staff from OIT and the Maine PUC. The group was chaired by the Executive Director of the ConnectME Authority. The group started meeting in June 2008, with the last meeting July 13, 2009. There were over forty large and small group (for specific tasks) meetings as well as hundreds of email messages exchanged.

Section 3 of the Act contained a December 15, 2008, deadline. Because of the complexity of the issues involved, the multitude of interested stakeholders, and the firm belief by all that there was great value in a model agreement, OIT asked for and received two extensions of time from the Utilities and Energy Committee. While the finished product was submitted considerably later than those extensions, the group believes that it crafted an exceptional product, well worth the time and effort.

III. FEDERAL BROADBAND ACTIVITIES AND INITIATIVES

A. American Recovery and Reinvestment Act of 2009

The American Recovery and Reinvestment Act of 2009 (ARRA) was signed into law by President Obama on February 17th, 2009. The Recovery Act appropriated \$7.2 billion for broadband development and directed the Department of Agriculture's Rural Utilities Service (RUS) and The Department of Commerce's National Telecommunications Information Administration (NTIA) to expand broadband access to unserved and underserved communities across the U.S., increase jobs, spur investments in technology and infrastructure, and provide long-term economic benefits.

The result is the RUS Broadband Initiatives Program (BIP) and the NTIA Broadband Technology Opportunities Program (BTOP). BIP will make loans and grants for broadband infrastructure projects in rural areas. BTOP will provide grants to fund broadband infrastructure, public computer centers, and sustainable broadband adoption projects.

The Authority will continue to work in collaboration with other state agencies and Maine businesses, to provide assistance and information regarding grant applications and projects.

The Authority did submit comments to the NTIA regarding suggested changes to the BIP and BTOP programs for the next funding round, especially regarding the definition of “remote area,” which we felt was too restrictive for a very rural state such as Maine.

²³ PL 2007, c. 548. A separate report and the model franchise agreement was submitted to the Joint Standing Committee on Utilities and Energy on October 28, 2009.

B. Federal Communications Commission

The FCC is currently working in coordination with the NTIA to perform the FCC's role under the Recovery Act. Specifically, in conjunction with the Broadband Technology Opportunities Program established by the Act, the FCC has been tasked with creating a National Broadband Plan by March 17, 2010. The Recovery Act states that the National Broadband Plan shall seek to ensure all people of the United States have access to broadband capability and shall establish benchmarks for meeting that goal.

C. Federal Legislation

The "Broadband Data Improvement Act" (BDIA) directs the Secretary of Commerce to address the lack of accurate information about broadband service across the country.²⁴ Most significant for Maine, the BDIA also provides for grants to develop and implement statewide initiatives to identify and track the availability and take rates of broadband services within each state. ARRA funds are used to provide funding for the BDIA.

The BDIA requires the FCC to: 1) revise the definitions of advanced telecommunications capability meaning broadband; 2) identify tiers of broadband service where most connections can reliably transmit full-motion, high definition video; 3) revise certain provider reporting requirements to enable the FCC to identify actual numbers of broadband connections by customer type and geographic area; 4) determine certain demographic data for geographical areas that are not served by any provider of advanced telecommunications capability; 5) expand the American Community Survey to determine if persons subscribe to internet service and, if so, by dial-up or broadband; and 6) provide eligible entities including state agencies electronic access to aggregate data collected by the FCC from broadband service providers. The importance of this to Maine is explained below.

The Authority applied for a mapping grant under the BDIA program, see below for more details.

IV. ONGOING AUTHORITY ACTIVITIES

There are many opportunities and responsibilities for the ConnectME Authority in 2010, including expanded participation in federal and state initiatives; additional grant rounds; mapping served and unserved areas; and working with local governmental organizations.

A. Maine Broadband Strategy Council

The Broadband Strategy Council was created to advise the ConnectME Authority on all matters pertaining to broadband opportunities available under the American

²⁴ S. 1492, Signed by President Bush, Oct 10, 2008: Became Public Law No: 110-385.

Recovery and Reinvestment Act of 2009, as well as advise the University of Maine System with respect to matters pertaining to the lease or sale of excess broadband capacity of the educational broadband service ("EBS").

The BBSC is made up of two members of the Senate; three members of the House; a representative of the Department of Administrative and Financial Services, Office of Information Technology; the Commissioner of Economic and Community Development or the commissioner's designee; the chair of the Public Utilities Commission or the chair's designee; the Executive Director of the ConnectME Authority; a representative from the University of Maine System; and a representative from the Maine School and Library Network.

For the first round of ARRA broadband grants, the BBSC met five times since July 2009, to craft a review process and to discuss all seventy-two USDA/RUS and NTIA grant applications that are either Maine-specific or multi-state projects that may pertain to Maine citizens. The BBSC reviewed all the application using five criteria:

1. Proposed projects must be consistent with the BBSC vision,
2. Proposed projects should foster and support economic development,
3. Proposed projects should preserve existing jobs and create new jobs,
4. The BBSC will assess proposed projects in regard to their value, and
5. The BBSC will assess proposed projects in regard to their viability.

While the USDA/RUS was not seeking state input for its BIP projects, the BBSC did review those with the NTIA BTOP projects. Of the total of nineteen state-specific projects, the BBSC recommended nine to the Authority for funding. Four were projects of interest, but did not have enough information to recommend fully, and six were not recommended for funding. The BBSC did not recommend any of the multi-state projects for funding. One was a project of interest that merits more investigation ("Broadband for the Deaf and Hard of Hearing"). The Governor's final recommendation to the NTIA Administrator included four infrastructure projects totaling over \$38 million plus three others (two for Sustainable Broadband Adoption and one for a Public Computer Center) for an additional \$4.7 million. The largest infrastructure projects included two submitted by FairPoint Communications and one by GWI, called the Three Ring Binder. (See Governor's letter, Attachment D)

The BBSC expects to use the same process to review and recommend applications submitted in the second NTIA grant round, estimated to open in January 2010.

On December 17, 2009, the Secretary of the US Department of Commerce traveled to Maine to announce an NTIA grant award to the Three Ring Binder project for \$25.4 million, to build a fiber ring, middle-mile system in Maine.

Because of the importance of the project to advancing broadband deployment in Maine, the Authority will assist and support the operators of the Three Ring Binder

project to ensure that all participants and potential customers derive the most benefit from the federal funding.

B. Coordinate Broadband Initiatives

Looking at the mid and long-term, perhaps the most important role for the ConnectME Authority will be to continue to serve as a conduit for Maine's broadband initiatives at all of the levels of government and across the agencies. The Executive Director participates and contributes to efforts to identify and coordinate solutions to regulatory, policy, and structural challenges to expanding the availability of advanced communications infrastructure in Maine.

We believe that working in collaboration with other agencies and at all levels of government is a means of enjoying economies of scale and holds potential for securing additional funding for Maine's broadband efforts.

C. Broadband Mapping and Inventory Project

The Authority's activities confirm that not only are communications services, especially broadband services, in Maine not "reasonably comparable" with services provided regionally and nationally, but are not reasonably comparable within the State. A primary goal of the ConnectME Authority is to expand broadband access in the most rural, unserved areas of the state. It would be very difficult for unsupported projects to be financially viable in these areas. The support from the ConnectME grants alters the financial equations enough to allow the services to be offered. To meet this goal, the Authority must determine with the highest degree of certainty it can, where broadband is and, more importantly, is not.

The Authority is required to collect, aggregate, coordinate, and disseminate information and data concerning communications services and advance communications technology infrastructure in the State.²⁵ For many years, the FCC has provided broadband reports that allow a reasonable comparison picture across the states. However, they tend to seriously overstate the availability of broadband services because if one subscriber is found under an entire zip code, the FCC considers the entire zip code to have broadband. This overstatement is particularly true in a state like Maine. The BDIA discussed above, changes the reporting criteria to a more granular system.

In 2009, the Authority began a comprehensive mapping and inventory project to obtain more granular, Maine-specific information regarding broadband availability. We are working with the Office of Information Technology, and the Maine Office of GIS, to conduct a mapping project that will use a combination of provider and public data to refine our understanding of unserved areas of Maine. The Authority issued an RFP that

²⁵ 35-A, M.R.S.A. §9204(3)(A).

resulted in a contract with James Sewall Company of Old Town to conduct the comprehensive broadband mapping and inventory project.

In August 2009, the Authority applied for a mapping and planning grant from the NTIA as part of its BTOP program funded under the ARRA. While the official announcement letter has not yet been received, the Authority was recently notified that it will be awarded the grant, for an amount estimated to be \$1.8 million, to be used over the next two to five years. The grant amount is approximately \$1.3 million for broadband data collection and mapping activities over a two-year period and nearly \$440,000 for broadband planning activities over a five-year period in Maine, bringing the total grant award to nearly \$1.8 million.

D. Broadband Adoption and Take Rates

A secondary goal of the Authority is to increase the demand for broadband services.²⁶ Increasing the adoption or “take rate” makes broadband infrastructure in rural areas more feasible, because providers will be able to generate more revenue in the same small area. The Authority continues to encourage applications like telehealth, aggregating demand with communities, and online commerce to increase the demand.

The Authority will assist the two Sustainable Broadband Adoption projects and the Public Computer Center project to ensure that they have the resources they need and the support required for success.

A major barrier to broadband adoption is access to a computer. The Authority has previously contacted the “PCs for Maine Project” which was created to help people with low incomes overcome the normally high cost of a personal computer and to provide technical support and training. This program provides more than inexpensive computers primarily using donated computers; it also provides training resources and support. Since 2002, this non-profit program has provided thousands of high quality computers, support, and training resources for a very low cost to individuals, families, and non-profits who need them to achieve job skills development and educational goals. The Authority continues to believe that this is an important initiative that uses education efforts to increase technical skills, and thus improve hireability and personal income.²⁷

E. Access to Facilities and Rights of Way

An ongoing challenge for broadband service providers, especially fixed-wireless providers, is obtaining access to existing towers, high points, and public buildings for the location of equipment. The issue of access to existing utility poles and the cost and time for make-ready work is a large challenge for independent wired broadband service

²⁶ As stated under Additional Duties in 35-A, M.R.S.A., §9204(3)(F), “Create and facilitate public awareness and educational programs to encourage the use of broadband services.”

²⁷ www.pcsformaine.org/

providers, both for last-mile and middle-mile facilities. These two issues cause unnecessary delay and higher cost for the expansion of infrastructure to serve the most unserved areas of the state.

A proposed US Senate bill, S. 1266 (also H.R. 2428), seeks to address part of the issue by requiring that broadband conduit be installed in highway rights-of-way as part of certain covered highway construction projects. It is an interesting solution that could also be used at the state level.

The Authority will convene a stakeholder group to explore and develop policies and procedures for use of private and public facilities such as radio towers, buildings, and rights-of-way by private service providers for expanding broadband and cellular service.

F. Health Information Technology

The Authority will participate in the state's Health Information Technology (HIT) initiatives. In 2009, the federal government announced that it would make available significant funding for States to develop and administer grants to medical providers to move to electronic medical records (EMR) and the use of technology such as broadband to enhance medical and preventative care. Maine has formed a "stakeholder" group to work on the HIT initiative. Currently, the Governor's Office of Health Policy and Finance coordinates this effort. We understand that there will be further discussions on how to move forward on this important initiative. The ConnectME Authority wholeheartedly agrees with the importance of technology and medicine.

V. CONCLUSION

The short history of the ConnectME Authority has shown that supporting small public-private initiatives to expand broadband has been and will continue to be the best strategy. Much has been accomplished in the past three years to better position Maine as a state that embraces what technology can offer.

Maine is on its way to realize its universal broadband availability goals. Yet much work remains for Maine to become a leader and to gain from the benefits of broadband including employment opportunities, education, healthcare, and public safety. We also need to coordinate State and Federal activities to ensure that we take advantage of all opportunities for funding and collaboration. The ConnectME Authority commits to working with all levels of government and public and private stakeholders to bring broadband advantages to fruition in Maine.

Attachments:

Attachment A – ConnectME Authority and Advisory Council Members

Attachment B – ConnectME Fund Reports

Attachment C – ConnectME Grant Awards: 2007, 2008, and 2009

Attachment D – Letter from Governor John E. Baldacci to the NTIA.

Attachment E – Glossary

ConnectME Authority and Advisory Council

Authority Members:

1. Jean Wilson, Chair, Vice President of Information Services at LL Bean
2. Mitch Davis, Chief Information Officer for Bowdoin College
3. Sharon Reishus, Chair of the Maine Public Utilities Commission
4. Dick Thompson, Chief Information Officer for Maine State Government
5. Vacant

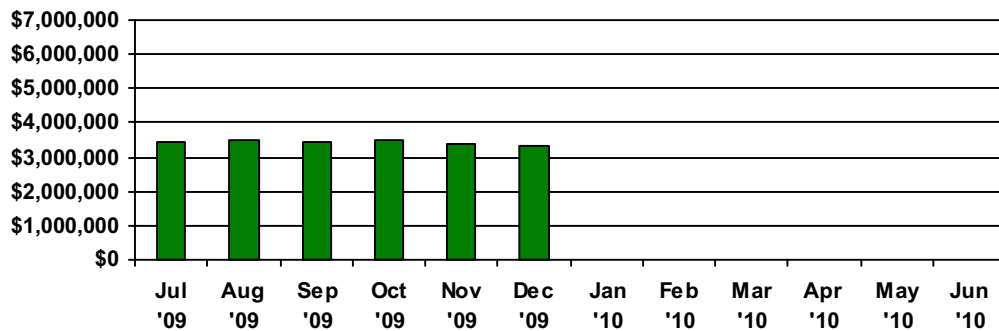
Advisory Council:

1. Fletcher Kittredge, GWI, Chair
2. Reggie Palmer, TDS Telecom and President of TAM, Deputy Chair
3. Armando Ruiz, VP Engineering, Time Warner Cable
4. Linda Lord, Maine State Librarian
5. Ralph Caruso, CIO - University of Maine System
6. Jeff Wheeler, HermonNet
7. Scott Thibeau, Project Manager MSLN (MTEAF)
8. Greg Schueman, Maine Technology Institute
9. John Burns, Small Enterprise Growth Fund
10. Pat Scully, Bernstein, Shur
11. Wayne Jortner, Office of the Public Advocate

Maine ConnectME Fund

Monthly Fund Performance Report for December 2009

	<u>December 2009</u>	<u>Fiscal Year to Date</u>
Opening Balance	\$3,411,554.83	\$3,206,146.82
Cash Receipts		
Assessments (Current Year)	\$1,306.28	\$367,279.00
Assessments (Prior Years)		\$432,083.51
Miscellaneous		\$857.73
Interest	\$46.09	\$385.14
Receipts Not Yet Allocated (to one of the above categories)	\$7,683.89	(\$65,763.27)
Total Receipts	\$9,036.26	\$734,842.11
Expenses		
Grant Disbursements	\$52,550.00	\$413,415.08
OIT Payroll and Personnel Svcs		\$69,966.44
Map Hosting	\$746.00	\$7,606.34
Administrative Fees	\$2,900.00	\$17,400.00
Audit Fees		
Miscellaneous	\$48,259.00	\$115,596.68
Refunds		\$868.30
Total Expenses	\$104,455.00	\$624,852.84
Operating Surplus/(Deficit)	(\$95,418.74)	\$109,989.27
Closing Balance	\$3,316,136.09	\$3,316,136.09



ConnectME Authority

ConnectME Fund			
2009-2010 Cash Flow (Estimate thru 6/30/2010)			
Fund Balance as of 12/31/2009		\$3,316,136	
Estimated Assessments Thru 6/30/10		\$600,000	
NTIA Mapping Grant		<u>\$0</u>	
Estimated Available Funds		\$3,916,136	
Expenses to be paid			
Salary/Expenses (2 quarters @ fully burdened rate)		\$62,000	
Additional Staff (est)		\$30,000	
Fund Administration (6 months)		\$17,400	
Travel		\$500	
Other Expenses		\$2,000	
Mapping Project (ConnectME Funds)		\$210,000	
Mapping Project (NTIA Grant Funds)		<u>\$0</u>	
expenses subtotal		\$321,900	
Second Round Grants to be paid			
Axiom - Washington County		\$34,000	
Redzone - MDI		\$131,000	
Franklin Community Health Network		<u>\$358,000</u>	
subtotal		\$523,000	
Third Round Grants to be paid		\$576,000	
Fourth Grant Round		<u>\$1,000,000</u>	est.
grants subtotal		\$2,099,000	
Total Disbursements		\$2,420,900	
Estimated Fund Balance 6/30/2010		\$1,495,236	

ConnectME Grant Awards
Three Grant Rounds
2010 Annual Report

Applicant	Community Partner or Eligible Partner	Communities Served	Estimated Household Availability	Unserved Area	Technology	Percent Area To Be Served	Total Project Cost	Grant Award	Percent Grant	Completed or Est. Complete Date	Customers at Project Completion: Actual/Expected	Notes	Grant Round
Axiom Technologies	Washington County: One Community	Addison, Beals, Centerville, Cherryfield, Columbia, Columbia Falls, East Machias, Jonesboro, Jonesport, Machias, Machiasport, Marshfield, Roque Bluffs, Whitneyville, Calais, Eastport, Milbridge, Pleasant Point Res.	7,614	Yes	Wireless	70%	\$284,369	\$79,947	28%	10/31/2008	620/1572	Mitton Mountain Zone Project.	1
Chebeague.net, Inc.	Chebeague Is.	Chebeague Is.	499	60%	Wireless	100%	\$175,392	\$75,000	43%	6/10/2008	145/270	With MainelyWired	1
Cornerstone Communication	Piscataquis County Economic Development Council	Abbot, Atkinson, Barnard Twp, Blanchard Twp, Bowerbank, Bradford, Brownville, Charleston, Corinth, Dexter, Dover-Foxcroft, Elliotville Twp, Guilford, Hudson, LaGrange, Lakeview Plantation, Milo, Monson, Orneville Twp, Parkman, Sangerville, Sebec, T5 R9 NWP, Williamsburg Twp, Willimantic	4,000	Yes	DSL & wireless	90%	\$518,875	\$368,377	71%	2/24/2009	319/925		1
Monson, Town of	Cornerstone Comm.	Monson, Blanchard	634	Yes	DSL & wireless		\$83,200	\$62,400	75%	6/29/2009	20/126	Granted extension to 6/30/09	1
Redzone Wireless	Mount Desert and Cranberry Isles	Cranberry Isles, Seal Harbor, Somesville, Pretty Marsh, Great Cranberry, Islesford, Sulton, Baker Is.	810	Yes	Wireless	80%	\$325,000	\$115,000	35%	6/1/2008	1,300 Actual		1
Somerville, Town of	Midcoast Internet Solutions	Somerville	279	Yes	Wireless	95%	\$143,500	\$38,000	26%	11/7/2008	13/150		1
Axiom Technologies	Town of Steuben	Town of Steuben	453	Yes	DSL/Wireless	90%	\$150,428	\$45,078	30%	8/20/2009	69/250		2
Axiom Technologies	Washington County: One Community, Sunrise County Economic Council, Washington County Emergency Management Agency	Alexander, Baileyville, Baring, Charlotte, Codyville, Cooper, Crawford, Cutler, Danforth, Dennysville, Edmunds, Grand Lake Stream, Harrington, Indian Township, Lubec, Marion, Meddybemps, Northfield, Pembroke, Perry, Princeton, Robbinston, Talmadge, Topsfield, Trescott, Vanceboro, Waite, Wesley, Whiting	5,785	Yes	DSL/Wireless	90%	\$1,868,091	\$532,640	29%	2/1/2010		Washington County Broadband Project	2
Franklin Community Health Network	To be determined by RFP under FCC guidelines.	Rural areas of Franklin, Oxford, and Androscoggin Counties.	NA	Unserved and underserved areas of 26 towns in four counties.	Fiber network linking 7 healthcare facilities in 6 towns and 7 addresses in year one.	NA	\$2,385,600	\$357,840	15%	Six month extension to 3/1/2010		Grant request is for 15% match requirement for first year of a two year Federal grant = \$3.6M over two years.	2
Mainely Wired LLC	Town of Penobscot	Penobscot, parts of Blue Hill, Brooklin, Castine, Orland	900	Yes	Wireless	95%	\$327,400	\$157,300	48%	12/31/2008	79/440		2

ConnectME Grant Awards
Three Grant Rounds
2010 Annual Report

	Applicant	Community Partner or Eligible Partner	Communities Served	Estimated Household Availability	Unserved Area	Technology	Percent Area To Be Served	Total Project Cost	Grant Award	Percent Grant	Completed or Est. Complete Date	Customers at Project Completion: Actual/Expected	Notes	Grant Round
12	Redzone Wireless	Support from many of the listed communities.	All or parts of the following: Bar Harbor, Tremont, Frenchboro Is., Swans Is., Winter Harbor, So Gouldsboro, Trenton, <i>other</i> (So Surry, Lamoine, Hancock, Sullivan, Sorrento, Stonington, Deere Isle, Brooklin, Isle Au Haut)	1,540	Yes	Wireless	varies	\$816,420	\$346,370	42%	3/31/2010			2
13	Axiom Technologies	Town of Eastbrook	Town of Eastbrook	219	Yes	Wireless	90%	\$184,639	\$92,320	50%	2/1/2010		May be cancelled due to private investment.	3
14	Edgecomb Broadband Committee	Time Warner, Lincolnville Comm.	Town of Edgecomb	758	Yes	FTH & CTH	100%	\$464,498	\$232,250	50%	7/30/2010		Grant Conditions: Cooperate with incumbent company and not to install end-user equipment in Fairpoint normal service areas.	3
15	Fairpoint Communications	Town of Arrowsic	Town of Arrowsic	238	Yes	DSL	100%	\$105,120	\$52,560	50%	1/30/2010			3
16	Premium Choice Broadband		Town of Franklin	736	Yes	Wireless	60%	\$105,500	\$52,750	50%	2/1/2010		Grant Conditions: Cooperate with incumbent companies and not to install end-user equipment in Fairpoint or Time Warner normal service areas.	3
17	Premium Choice Broadband		Town of Hammond	221	Yes	Wireless	unknown	\$157,500	\$78,750	50%	5/1/2010			3
18	Premium Choice Broadband		Town of Jackman	312	Yes	Wireless	80%	\$97,500	\$48,750	50%	2/1/2010		Grant Conditions: Cooperate with incumbent company and not to install end-user equipment in Fairpoint normal service areas.	3
19	Premium Choice Broadband		Town of Rockwood	836	Yes	Wireless	33%	\$99,000	\$49,500	50%	2/1/2010			3
20	Premium Choice Broadband		South Rangely area	442	Yes	Wireless	60%	\$85,500	\$42,750	50%	2/1/2010		Grant Conditions: Cooperate with incumbent company and not to install end-user equipment in Fairpoint normal service areas.	3
21	Town of Jefferson	Midcoast Internet Solutions	Town of Jefferson	684	Yes	Wireless	100%	\$120,000	\$52,550	44%	11/23/2009	21/100	Grant Conditions: Cooperate with incumbent companies and not to install end-user equipment in Time Warner or Fairpoint normal service areas.	3
22														
23	Totals			26,960				\$8,497,532	\$2,880,131	33.9%			Number of Grants	20



STATE OF MAINE
OFFICE OF THE GOVERNOR
1 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0001

JOHN ELIAS BALDACCI
GOVERNOR

SENT ELECTRONICALLY

Lawrence E. Strickling
Administrator
National Telecommunications and Information Administration
United States Department of Commerce
1401 Constitution Ave, NW
Washington, D.C. 20230

October 14, 2009

Dear Administrator Strickling:

As a geographically large state with a small population, Maine has been especially challenged in providing high-quality, cost-effective broadband service to our homes, businesses and anchor institutions. While our ConnectME Authority has distributed millions in grants to stimulate private investment in broadband in Maine, many parts of our State remain completely unserved or severely underserved.

Robust ARRA funding would provide a critical boost to our local efforts to bring 21st century technology to Maine, bringing with it both short-term and long-term economic opportunity.

Process for Determining State Recommendations

Maine received information about seventy-two (72) projects that would potentially touch on services in our State. Fifty-three (53) of the projects offered only peripheral impact, if any, within Maine. With one notable exception (Broadband for the Deaf and Hard of Hearing), we do not wish to provide encouragement for those projects.

Nineteen (19) of the projects specifically provide services to Maine. As the first step in our State review process, the proposals were reviewed and commented upon at public meetings of the "Broadband Strategy Council," which is composed of legislators and a representative of our Public Utilities Commission, the Maine Department of Economic and Community Development, our state Office of Information Technology, our state broadband initiative agency (ConnectME), our University system and the school and library network. As the second step, the ConnectME Authority reviewed and confirmed the Council's recommendations. Public input was invited and provided during both steps of the process.

To prepare final comments, I reviewed the recommendations of the Broadband Strategy Council and ConnectME, and conferred with Dick Thompson, the State's Chief Information Office as well as members of my staff. I want to thank the Broadband



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Strategy Council members for their hard work in a very short time frame. Their analysis and commentary provide the basis for my comments to you.

Recommended Projects

Based on advice from the Broadband Strategy Council and the ConnectME Authority, as well as consultation with Maine's Chief Information Officer, the State strongly recommends that NTIA and/or RUS approve the following grant applications, grouped by funding category and listed in alphabetical order by project name. Attachment A contains a project summary for each and the rationale for our positive recommendation.

Broadband Infrastructure – 4 projects totaling \$38,075,121

- **Aroostook County Last Mile Project**
- *Fairpoint Communications, Inc (applicant)*
- **Chebeague Island Broadband Initiative**
- *Chebeague.net, Inc. (applicant)*
- **“Three Ring Binder” Middle Mile Project**
- *Biddeford Internet Corp (d.b.a. GWI) (applicant)*
- **Washington/Hancock County Last Mile Project**
- *Fairpoint Communications, Inc (applicant)*

Sustainable Broadband Adoption – 2 projects totaling \$3,436,608

- **Broadband with a Purpose Maine**
- *Fairpoint Communications, Inc. (applicant)*
- **Washington County WiMAX Project**
- *Axiom Technologies (applicant)*

Public Computer Center – 1 project totaling \$1,216,467

- **Maine Library Learning Network**
- *Maine State Library (applicant)*

Projects of Interest

There were several projects that appeared to have merit in meeting our goal to provide broadband throughout Maine, but we were not able to make a definitive recommendation either because we lacked sufficient information or we had some technical concerns with the proposal. These projects are further described and commented upon in Attachment B.

Last Mile Project
Motorbrain Consulting (applicant)

Middle Mile Project
NATVentures, LLC (applicant)

Sustainable Broadband
NATVentures, LLC (applicant)

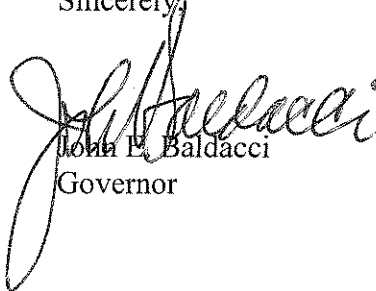
Public Computer Center
Faith in Action Community Connection (applicant)

Public Computer Center
Southern Aroostook Cooperative Board of Education (applicant)

If you have questions about our position on any of these projects, please feel free to contact me, or our state point of contact, Dick Thompson.

As you deliberate nationally on the use of ARRA funds for broadband, I hope that we can work together to ensure that projects that you approve will provide a true and long-lasting public benefit.

Sincerely,



John E. Baldacci
Governor

cc: Ian Martinez

ATTACHMENT A -- Maine Projects Recommended for Funding
(listed by funding category and alphabetically by project name)

Broadband Infrastructure

Aroostook County Last-Mile Project (Fairpoint) (\$7,865,817 grant)

Summary: This project will expand high speed broadband to remote, underserved areas of Aroostook County, the northernmost rural county in Maine. This is a last mile project (with some enabling middle mile components) that is critical to the region's competitiveness in a 21st century economy. Northern New England Telephone Operations LLC d/b/a FairPoint Communications-NNE is the co-applicant.

Comment: This project strengthens Maine's telecommunications infrastructure by providing critical last mile service to remote and unserved areas in Aroostook County. Funding of the project will accelerate deployment of this service which is so important because these areas are struggling economically. Deployment of this service is absolutely necessary for economic development in the region. As Maine's largest telecommunications provider the applicant is working closely with all of our economic development entities in a collaborative effort to ensure project success.

Chebeague Island Broadband Initiative (chebeague.net, inc.) (\$73,470 grant and \$75,000 loan)

Summary: The project will extend broadband Internet services to unserved portions of Chebeague Island and will improve bandwidth for the entire Island, which is underserved. In addition, the project will position the system for possible future microwave acquisition of bandwidth and may be used to extend needed cellular telephone service to the Island which, in large part, is unserved.

Comment: This is a very modest project to support one of Maine's island communities. The unique locally-organized effort provides service in a community that otherwise would be unserved. We are confident that this previous ConnectME Authority grantee will be able to successfully complete the project as presented.

"Three Ring Binder" Middle-Mile Project (Biddeford Internet Corp, dba GWI) (\$25,402,904 grant)

Summary: The Three Ring Binder project is a middle mile open-access collaborative fiber optic network in the most rural and remote areas of Maine. This project allows the delivery of 100 Mbits+ broadband connectivity to businesses, households, and community anchor institutions in these areas facilitating rural economic development, job stimulation, education, and health care.

Comment: This project would be of great benefit for Maine's long-term infrastructure needs, providing critical middle mile capabilities. It complements the other last mile projects we are recommending for funding. The project supports all elements of our economy: consumers, small businesses, and high speed users in our research and development community. It also leverages other initiatives such as rural health care, cyber infrastructure for the University of Maine and other research institutes, and the Maine School and Library Network. Furthermore, this technology will enhance the provision of service in rural Maine. Using open access, this proposal is a collaboration of multiple partners with long term maintenance of the dark fiber assets managed by a neutral third party. It strengthens Maine's telecommunications infrastructure by providing high speed redundancy and diversity within the state and with regional/national connectors.

Washington/Hancock Last Mile (Fairpoint) (\$4,732,930 grant)

Summary: This project will expand high speed broadband to remote, underserved areas of Washington and Hancock Counties in northeast Maine. This is a last mile project that is a critical component of the region's economic development plan. FairPoint

Communications, Inc. is the lead applicant, the co-applicant is Northern New England Telephone Operations LLC d/b/a FairPoint Communications - NNE.

Comment: This project strengthens Maine's telecommunications infrastructure by providing critical last mile service to remote and unserved areas in Washington and Hancock Counties. Funding of the project will accelerate deployment of this service which is so important because these areas are struggling economically. Deployment of this service is absolutely necessary for economic development in the region. As Maine's largest telecommunications provider the applicant is working closely with all of our economic development entities in a collaborative effort to ensure project success.

Sustainable Broadband Adoption Projects

"Broadband with a Purpose" (Fairpoint) (\$1,802,384 grant)

Summary: Broadband with a Purpose-Maine will help the people and institutions of rural Maine understand how broadband can be used to access global resources, work more productively, and enjoy the social benefits of being connected. It is designed to replace the "build it and they will come mentality" with a project based learning approach emphasizing the value of broadband.

Comment: Sustainable adoption efforts are very important to increase the take rate and so this project is well targeted. The application presents a defined plan and time table to achieve results with measurable outcomes. It includes important partnerships with the Economic Development Districts and the Maine Community College System and a relationship with Information Technology Exchange (ITE) to provide low cost computers to low income families.

Washington County WiMAX (Axiom Technologies) (\$1,634,224 grant)

Summary: The Washington County WiMAX Project focuses on helping the fishing, agricultural, and health care sectors develop and demonstrate the effective uses of the technology. An education and training program for the fishing and farming industry will be implemented, and a pilot program will be developed for the use of a mobile telemedicine system.

Comment: Axiom Technology is a small Maine based business that has successfully deployed services with funding received from the ConnectME Authority. The project takes a holistic approach, attacking many of the issues holding back development of infrastructure and demand in Washington County, one of our poorest counties. This project provides a sustainability model for two of Maine's natural resource-based industries, farming and fishing, which are challenged. The company is planning to collaborate with the University of Maine - Machias to achieve the goals of the project.

Public Computer Center

Maine Library Learning Network (Maine State Library)(\$1,216,467 grant)

Summary: The ME Library Learning Network creates eight regional and eleven local public library computer centers equipped with computers, accessible workstations and IP-based video conference technology. These centers will expand access to broadband technology in Maine, and provide access and training for rural and un-served communities, small businesses, an aging population, and people with disabilities.

Comment: As a public computer center initiative, this application enhances capabilities at eight regional and eleven local libraries located in remote parts of Maine. In these communities, libraries are the key anchor institutions. The project complements other efforts to deploy broadband technology and supports those households who can not afford computers or broadband access. This is critical because many essential services are available online such as: health care information, education, financial planning, job-searches, online banking, and e-government services.

ATTACHMENT B -- Maine Projects of Interest (listed alphabetically by project name)

Faith in Community Connection

Summary: Faith in Action is partnering with the Downeast Family YMCA to operate a Senior Center in the recently closed middle school building in Ellsworth. The YMCA will operate their childcare programs there, while Faith in Action operates programs for seniors in the same building, sharing some space. The grant would allow the organizations to provide computer classes for senior and broadband access that can also be used by children and families.

Comment: While this project has some merit, more information was needed to answer a number of questions such as: what is the long term sustainability of the effort once the grant is exhausted; is the project fulfilling an unmet need; and what problem needs to be solved?

Motorbrain Consulting

Summary: Motorbrain will provide HughesNet high-speed satellite Internet service to 3400 unserved Maine homes and businesses where there are no existing broadband services available for a period of 24 months at no cost to the consumer. Through a collaborative effort with rural municipalities, they will identify last-mile consumers where cable Internet and DSL are not available.

Comment: Satellite service can provide a benefit to very remote households and businesses in Maine that have no other options. Satellite services do not currently qualify for grants by the ConnectME Authority, which has concerns about the technical quality and reliability of current services. However, satellite services appear to qualify for NTIA grants, and as an intermediate step towards more robust service, would be of benefit to some homes and businesses in Maine.

NATVentures (2 applications)

Summary: To expand high speed broadband to rural, underserved areas of Maine, including all Native American Tribal lands within Maine; also a public computer center project.

Comment: The State of Maine is interested in supporting its Native American tribes which are located in remote, economically challenged regions of Maine. Unfortunately the material provided did not contain sufficient detail for the Council to make a thorough evaluation.

Southern Aroostook Cooperative Board of Education

Summary: On behalf of its partners, Region Two School of Applied Technology is requesting funds to expand computing facilities at 17 sites throughout the state of Maine. The goal of this project is to enhance educational services for adult community members at regional vocational and technical schools by expanding access to broadband.

Comment: This proposal does not define an enduring or measurable benefit or a means to achieve a sustainable program once the grant is exhausted. Although there is a focus on retraining displaced workers, it is unclear how this would be coordinated with other retraining efforts. In addition the lack of detail regarding the need and programs prevent a thorough review.

ATTACHMENT C -- Maine Projects Not Recommended for Funding

USA Webhost

Summary: WiME I is a proof of concept of 4G as an access network technology for rural Maine, and of naming and associations over IPv6 as a link characteristic-informed, locality-aware technology.

Comment: This proof of concept project is not aligned with the Council's or ConnectME Authority's vision. Long term viability is questionable as it is not clear how the pilot project would transition into a sustainable service.

USA Webhost

Summary: Reverse 911 services that allow municipalities to enhance their emergency notification processes with massive simultaneous dial out of emergency calls to both broadband consumers in normal or catastrophic conditions.

Comment: This pilot project is not aligned with the Council's or ConnectME Authority's vision and it is not clear that the proposed service fits the RUS/BIP criteria. The direct connection to middle mile infrastructure improvements is not demonstrated.

Vanu Coverage Co. (3 applications with the same coverage area)

Summary: Vanu Coverage Co. proposes to deploy a multi-standard wireless network and operate as a wholesale provider to existing retail wireless operators. This approach would bring voice and broadband data, as well as service provider choice, to unserved and underserved areas in Vermont, New Hampshire, New York, and Maine where broadband deployments previously have been cost-prohibitive.

Comment: The three Vanu applications may be an interesting idea but are multistate applications and it is unclear what portions are allocated to Maine. The project relies on as yet uncommitted retail carriers to provide household subscriber service. Furthermore cellular service does not currently meet the ConnectME Authority's definition of broadband service.

GLOSSARY

BPL (broadband over power lines), a technique for delivering high-speed Internet access over electrical power lines, with the ability to use house wiring to connect to computers.

Broadband, an elastic term describing high-bandwidth, two-way, always-on data connections. The wider the pipe, the more data can be moved at the same time and hence the higher the effective speed. The FCC has seven broadband tiers with “basic broadband tier 1” referring to services equal to or greater than 768 kbps but less than 1.5 Mbps in the faster direction. A typical home user broadband connection today usually is 512 kbps upstream and 2-7 Mbps downstream. In a few years, those numbers are likely to be significantly higher. The term “broadband” is often used as shorthand for “high-speed Internet access.”

business user, a user in a business setting constituting a broad “middle class” in terms of bandwidth, reliability, and security needs. See also *home user*, *enterprise user*.

cable internet, a means of delivering broadband via coaxial cables, almost always simultaneously with cable television service and sometimes voice telephone service..

Central Office (CO), a switching station maintained by an ILEC where DSLAMs are generally deployed and from which the maximum range of DSL service (reckoned in “circuit feet,” distances over twisted-pair copper lines, not “as the crow flies”) can be determined.

CLEC, Competitive Local Exchange Carrier.

DS3, a fiber-based digital signal carrier with a rate of 44.736 Mbps.

DSL, digital subscriber line. There are many subtypes of DSL (VDSL, HDSL, etc.) of varying speed, range, and technical characteristics.

DSLAM, digital subscriber access multiplexer.

enterprise user, the most demanding, industrial strength broadband consumer that usually represents large, technology-intensive organizations.

fixed wireless, a non-mobile method of delivering broadband service to homes and businesses using line of sight radios.

FTTH/FTTP, fiber to the premises, home, et al. a method of connectivity using fiber optic cabling.

home user, the class of broadband consumer with the least demanding broadband needs but which also faces total unavailability of service in many areas.

ILEC, Incumbent Local Exchange Carrier.

ISP, internet service provider.

last mile, a term for the most remote and sparsely populated areas that are among the most challenging to provide with broadband, also known as the “local loop” for telecommunications services that makes the final connection to the premises.

middle mile, also known as backhaul, connects the last mile internet service provider with an Internet backbone service provider.

municipal network, a broadband network owned and operated by a city or town, often by lease arrangement with an ILEC/CLEC. The right of Maine communities to establish these networks was reaffirmed by the State Legislature.

Narrowband, low-speed data connections (such as dialup Internet access, which tops out at 56kbps and is generally even lower in real-world applications).

OCx, Optical Carrier service provided over fiber optic cable

PON (passive optical networking), a family of networking standards using a point-to-multi-point architecture for delivering last-mile connectivity without any active (i.e., powered) components in the distribution network. PON may provide hope for a last-mile solution because it involves fewer upgrades to the current infrastructure than competing technologies.

Remote Terminal, a remote switching station, or “sub-station” maintained by an ILEC where DSLAMs are generally deployed and from which the maximum range of DSL service (reckoned in “circuit feet,” distances over twisted-pair copper lines, not “as the crow flies”) can be determined.

symmetrical/asymmetrical, describes whether a data connection operates at the same speed or bandwidth when traveling upstream as it does when traveling downstream. A symmetrical connection is the same speed up or down; an asymmetrical connection is usually slower on the upload than on the download.

synchronous/asynchronous, describes whether a communications stream is completely continuous (synchronous), or can occur at any time and at irregular intervals (asynchronous). Most connections between computers, including those connected via broadband, are asynchronous.

T-1, trunk level digital carrier, originally provided over copper facilities, with a signaling speed of 1.544 Mbps.

take rate or penetration rate or adoption rate, a measure of the ratio of potential subscribers to whom service is available to those who actually sign up for that service.

triple play, the application of broadband that delivers voice, data, and video service over the same transport pipe.

WiFi (wireless fidelity), a form of wireless networking in the IEEE 802.11x family of standards that is generally used for connectivity of wireless large-area networks (WLANs) inside buildings and small outdoor areas, but which has shown remarkable usefulness as a way of providing high-speed Internet over wider distances via towers, high-gain antennae, and mesh-network technologies that significant exceeds what WiFi was originally intended to do.

WiMAX (Wireless Interoperability for Microwave Access), an emerging form of fixed wireless broadband access in the IEEE 802.16x family of standards. The licensed version has a theoretical range and distance of up to 30 miles and 50Mbps or higher but is only available to the larger carriers. WiMAX is able to overcome some of the topographical issues faced by other forms of wireless broadband.

WISP, wireless internet service provider.